AGREEMENT FOR THE PURCHASE AND INSTALLATION OF AN UPGRADE TO THE DISTRIBUTED CONTROL SYSTEM BETWEEN THE CITY OF SAN JOSÉ AND ABB INC. DBA ABB DE INC.

This Agreement is entered into as of between the City of San José, a municipal corporation ("City"), and **ABB Inc. dba ABB DE Inc.**, a Delaware corporation authorized to transact business in the State of California ("Contractor").

RECITALS

- Contractor is the maker of the control system software and hardware. Contractor provided the existing Distributed Control System to the City beginning in the early 1990s; and
- 2. Contractor understands the City's requirements for the Distributed Control System through Contractor's examination of City's existing system and use; and
- Contractor represents that the upgrade to the Distributed Control System has been sized to meet City's current needs and to accommodate growth in the future; and
- 4. Contractor has the necessary expertise and skills to perform such services and Contractor's proposal can best meet City's needs;

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

1 AGREEMENT DOCUMENTS

The documents forming the entire Agreement between City and Contractor shall consist of this Agreement including:

EXHIBIT A - Scope of Services

EXHIBIT A-1 Payment and Performance Schedule

EXHIBIT B - Compensation & Price List

EXHIBIT C - Insurance Requirements

EXHIBIT D - Change Order Form

EXHIBIT E- Service Grid Maintenance and Support Services Agreement

EXHIBIT F- Other Equipment Purchases

In the event any discrepancies or inconsistencies between the provisions of this Agreement and any of the above-referenced documents arise, the provisions of this Agreement will prevail.

This Agreement and the Exhibits set forth above, contain all of the agreements, representations and understandings of the Parties hereto, and supersede and replace any previous understandings, commitments, or agreements, whether oral or written. Any other terms or conditions included in any shrink-wrap or boot-screen license agreements, quotes, invoices, acknowledgments, bills of lading, or other forms utilized or exchanged by the Parties shall not be incorporated in this Agreement or be binding upon the Parties unless the Parties expressly agree in writing or unless otherwise provided for in this Agreement.

2 TERM OF AGREEMENT

The term of this Agreement is from April 1, 2013 to December 31, 2015, inclusive, subject to the provisions of Section 11. Notwithstanding the foregoing, the term of the Exhibits E and F Service Grid Maintenance & Support Services and Other Equipment Purchase Agreements shall be as provided in the respective agreements.

3 SCOPE OF SERVICES

3.1 Scope of Work

Contractor agrees to perform the services set forth in the Scope of Services which is attached as Exhibit A hereto and incorporated as though fully set forth herein (the "SOS").

3.2 Equipment

Any additional equipment required for final system acceptance per the agreed specifications but not reflected in the Contractor's proposal and pricing shall be the sole responsibility of the Contractor and at no cost to the City.

3.3 Notification

Contractor agrees to notify City promptly of any factor, occurrence, or event coming to its attention that may affect Contractor's ability to meet the requirements of the Agreement, or that is likely to occasion any material delay in completion of the projects contemplated by this Agreement. Such notice shall be given in the event of any loss or reassignment of key employees, threat of strike, or major equipment failure.

3.4 Contractor's Software

The terms of the licensing of the Software, including subsequent releases are licensed to City and shall be as set forth in the EXHIBIT E – Service Grid Maintenance & Support Agreement.

3.5 Non-Contractor Software

Contractor shall procure, on City's behalf, the Third Party Software, pursuant to and in accordance with Exhibit A - Scope of Services. Contractor shall obtain from all suppliers of the equipment and the Third Party Software, all standard guarantees and

warranties normally provided on all machinery, equipment, services, materials, supplies and other items used in connection with the performance of the Services, including all such machinery, equipment, materials and other items which are incorporated into the System. Contractor shall obtain from each such supplier guarantees and warranties which are assignable to City and shall, upon request of City, obtain an option for City to purchase a guarantee or warranty from such suppliers covering a longer period than the Warranty Period if commercially available at City's expense. Contractor shall enforce all guarantees and warranties until such time as such guarantees or warranties expire or are, if applicable, transferred to City as contemplated by this Section 3. Such guarantees and warranties shall, to the extent they have been made assignable, be transferred to City upon expiration or termination of this Agreement. Such guarantees and warranties shall, to the extent they have been extended, be transferred to City upon the earlier to occur of (1) the expiration of the Warranty Period, and (2) termination of this Agreement. Contractor shall, to the extent that a warranty or guaranty has been extended or made assignable to City pursuant to this Section 3, deliver to City copies of all such guarantees and warranties and relevant extracts from all related technical specifications. Nothing in this Section 3 shall derogate from the obligations of Contractor to provide the guarantees and warranties described in, and to comply with the provisions of this Agreement.

4 STANDARDS OF SERVICE

In connection with the performance of any Services pursuant to this Agreement:

4.1 Number of Employees

Contractor certifies it will provide sufficient employees to complete the Services ordered within the applicable time frames established pursuant to this Agreement. Furthermore, Contractor shall, at its expense, supply all tools, equipment and other materials necessary to perform the Services described in this Agreement.

4.2 Skill of Employees

Contractor certifies that employees shall have sufficient skill, knowledge, and training to perform Services and that the Services shall be performed in a professional and workmanlike manner.

4.3 Duty of Confidentiality

All data, documents, discussions or other information developed or received by or for Contractor in performance of this Agreement are confidential and must not be disclosed to any person except as authorized by City, or as required by law. The City's proprietary interest in data, documents, discussions or other information developed by Contractor is limited to the engineering configurations for HMI conversion provided by this Agreement. Contractor certifies that all employees utilized by Contractor in performing Services are under a written obligation to Contractor requiring the employee to maintain the confidentiality of information of City.

4.4 Security and Safety

Contractor shall require employees providing Services at a City location to comply with applicable City security and safety regulations and policies that are provided to Contractor prior to the regulation or policy going into effect. City may require each employee providing Services to undergo a background investigation comparable to City employees working on-site at the San Jose/Santa Water Pollution Control Plant, including, but not limited to a criminal records and fingerprint check. Contractor shall promptly replace any employee found to be unacceptable to City, in its discretion, on the basis of the results of a background investigation. Contractor will perform any such background check according to its own standards.

4.5 Contractor's Obligations to Employees

Contractor shall provide for and pay the compensation of employees and shall pay all taxes, contributions, and benefits (such as, but not limited to, workers' compensation benefits) which an employer is required to pay relating to the employment of employees. City shall not be liable to Contractor or to any employee for Contractor's failure to perform its compensation, benefit, or tax obligations. Contractor shall indemnify, defend and hold City harmless from and against all such taxes, contributions and benefits and will comply with all associated governmental regulations, including the filing of all necessary reports and returns.

4.6 Replacement of Employees

During the course of performance of Services, City may, for any reason, request replacement of an employee or a proposed employee coming onto City's premises. In such event, Contractor shall, within five (5) working days of receipt of such request from City, provide a substitute employee of sufficient skill, knowledge, and training to perform the applicable Services City may notify Contractor that (1) an employee's level of performance is unacceptable, (2) an employee has failed to perform as required, or (3) an employee, in City's reasonable opinion, lacks the skill, knowledge or training to perform at the required level. If City requests replacement of an employee for the above-referenced reasons, City shall not be required to pay for, and shall be entitled to a refund of, any sums paid to Contractor for such employee's Services after the date of City's requested replacement of such employee. Neither party shall be liable for any delays caused by City exercising its rights under this Section 4.6.

5 CHANGE ORDER PROCEDURE AND AUTHORIZATION

5.1 Changes

Any changes to this Agreement after the Effective Date that relate to (i) the deletion of Products or Services, (ii) adding additional Products, or Services (iii) changing or modifying Products or Services, or (iv) making other changes that materially alter the scope of this Agreement or the Deliverables required under this Agreement, including approval of all performance and/or payment schedules shall be made by the Director of Finance or designee in accordance with the procedures set forth below.

5.2 Contract Change Requests

Either party hereto may, from time to time, and at any time during the term hereof request a change, as defined in the above section. (The party requesting the change is hereinafter referred to as the "Requesting Party.") Requests for changes shall be in writing and shall be addressed and delivered to the other party. Such writing shall be identified as a "Contract Change Request," shall carry a sequential number for ease of tracking, shall set forth in detail the nature of the change requested and the costs associated therewith, and shall identify the Products, Services, Deliverables or Schedules to be changed.

5.3 Procedures

As soon as practical after receipt by the notified party of copies of the Request, the parties shall as necessary meet to discuss the change and to ascertain its cost and schedule impacts, if any.

5.4 Change Orders

If the parties decide to implement a change request, a standard form Change Order ("CO") shall be prepared in a form substantially similar to the form attached hereto as Exhibit D, which CO shall describe the change, delineate the cost, schedule, and other impacts of the change and the payment terms for any price increase. Only City's Director of Finance Services or designee and Contractor's Authorized Representative shall have authority to execute CO's to this Agreement. Execution of a CO by City's Director of Finance and Contractor's Authorized Representative shall constitute a modification hereof and shall be binding on both parties hereto.

6 COMPENSATION

6.1 Contract Price

The Total Contract Price in U.S. dollars shall not exceed ONE MILLION EIGHT HUNDRED FOURTEEN THOUSAND SEVEN HUNDRED EIGHTY FIVE Dollars (U.S. \$1,814,785.00) ("Maximum Compensation"). The terms, rate and schedule of payment are set forth in the attached Exhibit A-1, entitled "Payment and Performance Schedule" and Exhibit B entitled "Compensation & Price List." Contractor will submit to City invoices that include a breakdown of services provided for the corresponding milestone in accordance with attached Exhibit A-1. City will make payments to Contractor within thirty (30) days after the date of receipt of each invoice approved by the City consistent with Exhibit B. City will make payments when due in the form of a check, cashier's check, or wire transfer drawn on a U.S. financial institution.

6.2 Freight, Title, and Risk of Loss

All freight charges will be pre-paid by Contractor. Title to the Equipment (other than any software) will pass to City upon Contractor receiving full payment. Risk of loss will pass to City upon receipt of the Equipment to the City. Contractor will pack and ship all Equipment in accordance with good commercial practices.

7 TAXES AND CHARGES

City shall be responsible for filing sales and use tax reports applicable to the purchase of hardware and other goods from Contractor under this Agreement. These reports shall be filed on a quarterly basis following receipt of invoice for payment, and City shall pay the applicable sales and use tax. The estimated taxes are in the amount of Forty Two Thousand Seven Hundred Ninety Three Dollars (\$42,793.00) based on the California tax rate for 2013. Any other taxes, fees, contributions, or charges applicable to the conduct of Contractor's business shall be paid by the Contractor and is reflected in the Contract Price.

8 FINAL SYSTEM ACCEPTANCE

Upon completion of the commissioning period for the System, City and Contractor shall conduct a final acceptance test upon the System. The criteria for the final acceptance test is noted in Exhibit A - Scope of Services. When final acceptance occurs, the parties will document this event by promptly executing a System Acceptance Certificate. All warranties shall become effective and begin to run upon the successful completion of the final acceptance test.

If, in the reasonable discretion of City, the System does not meet the requirements of the final acceptance test specifications, City shall permit Contractor to repair or replace the System so that the same meets the Acceptance Test specifications in all material respects, all at no additional expense to City.

Payment for any part or parts of the System or Services provided hereunder, or inspection or testing thereof by City, shall not constitute acceptance or relieve Contractor of its obligations under this Agreement. City may inspect the components of the System when delivered and reject upon notification to Contractor any and all of the System which does not conform to the Specifications or other requirements of this Agreement. Components of the System which are rejected shall be promptly corrected, repaired, or replaced by Contractor in accordance with Contractor's warranty obligations under this Agreement, such that the System conforms to the warranties, Specifications and the other requirements of this Agreement. If City receives components of the System with defects or nonconformities not reasonably apparent on inspection, then City reserves the right to require prompt correction, repair, or replacement by Contractor in accordance with Contractor's warranty obligations under this Agreement following the discovery of such defect or nonconformity.

9 REPRESENTATIONS AND WARRANTIES

9.1 Equipment Warranty

Contractor warrants that equipment described in Exhibit B Compensation and Price List, shall, under normal use and service be free from defects in material and workmanship for the applicable warranty period. The warranty period shall be one (1) year from the date of Final System Acceptance. If City claims that equipment is not free from defects in material and workmanship, City shall (1) promptly notify Contractor in writing of the basis of such nonconformity; (2) follow Contractor's instructions for return of the equipment; and (3) return the equipment freight prepaid to Contractor's

designated location. Contractor shall at its own expense, repair or replace all defective equipment.

Services performed as part of the supply of equipment and software shall be free of defects in workmanship. If City claims that services are not free from defects in workmanship within a period of ninety (90) days after final acceptance, City shall promptly notify Contractor in writing of such nonconformity and Contractor shall, at its own expense, re-perform such nonconforming services. City shall be responsible for providing Contractor working access to the nonconforming equipment, for disassembly and re-assembly of non-Contractor supplied equipment, and for providing transportation from any repair facility, all of which shall be at City's risk and expense. Contractor shall have no obligation hereunder with respect to any equipment which (i) has been improperly repaired or altered; (ii) has been subjected to misuse, negligence or accident; (iii) has been used in a manner contrary to Contractor's instructions; (iv) is comprised of materials provided by or a design specified by City; or (v) has failed as a result of ordinary wear and tear. Equipment supplied by Contractor but manufactured by others shall be warranted for a period commensurate with the manufacturer's warranty, and Contractor shall purchase an extended warranty to ensure that City receives a warranty period that is at least as long as the original manufacturer warranty. City's remedies with respect to the hardware shall be limited to the warranty.

9.2 Missing and Incompatible Hardware Components

Contractor understands that City has relied upon the expertise of Contractor in the determination of all necessary DCS hardware to effectively address the specifications and requirements of this Agreement. As such, Contractor assumes full responsibility and financial risk to ensure that all required components are included in the System design described in the Scope of Services.

- In the event that any system component required to operate or maintain the System in accordance with the performance requirements contained in this Agreement is missing; or
- Any Contractor-supplied or specified hardware component is proven to be incompatible with the System design; such proof being evidenced by elimination of any error by the removal or replacement of the offending component, Contractor shall provide the missing or replace the incompatible component at no additional charge to City.

9.3 Protection Against Infringement

Contractor represents to City that the Software and equipment do not violate or infringe upon any patent or registered copyright, or misappropriate any trade secret or other proprietary rights of any other person or entity. Contractor agrees to hold the City harmless from any liability and to defend and indemnify the City, at Contractor's sole expense, in the event that a claim is filed or a suit is brought against City or any of its officers, employees, or authorized representatives, for the use of the Software or equipment due to a patent or registered copyright infringement by the Software or equipment. Contractor further agrees that if the Software or equipment is found to be infringing, Contractor will, within one (1) year:

- 1. Modify the Software or equipment, at Contractor's expense, so it becomes non-infringing, or
- 2. Replace the infringing Software or equipment with equal non-infringing Software or equipment, at Contractor's expense, or
- 3. Procure, at Contractor's expense, the necessary licenses for the City to continue using the Software or equipment.

Contractor's obligations under this Section 9.3 do not apply to any other equipment or software, including Equipment or Software which have been modified or combined with other equipment or software not supplied by Contractor; (ii) any Equipment or Software supplied according to a design, other than a Contractor design, not required by Contractor; (iii) any patent issued after the date hereof. Contractor's obligations under this Section 9.3 are contingent upon City having given Contractor prompt written notice of such action, all necessary assistance in the defense thereof and the right to control all aspects of the defense thereof including the right to settle or otherwise terminate such action on behalf of City. THIS SECTION 9.3 STATES THE ENTIRE LIABILITY OF CONTRACTOR AND EQUIPMENT MANUFACTURER FOR ANY PATENT INFRINGEMENT.

9.4 Operability

Contractor warrants that the Software as delivered does not contain any timers, counters, or preprogrammed devices that will cause the Software to become erased, inoperable, or incapable of processing in the manner as documented in the contract documents specified. Contractor warrants that the software as delivered does not contain any "back door," "time bomb," "Trojan horse," "worm," "drop dead device," "virus," or other computer software routines or hardware components designed to (i) permit access or use of either the System or City's computer systems by Contractor or a third party not authorized by this Agreement, (ii) disable, damage or erase the System or data, or (iii) perform any other such actions. Further, Contractor warrants that the System and the design thereof, both as delivered, shall not contain preprogrammed preventative routines or similar devices which prevent City from exercising the rights set forth in this Agreement or from utilizing the System for the purposes for which it was designed as specified in Exhibit A.

Contractor warrants that, except as specified below, Contractor's Software will, when properly installed, execute in accordance with Contractor's published specification. If a nonconformity to the foregoing warranty is discovered during the period ending one (1) year after final acceptance and written notice of such nonconformity is provided to Contractor promptly after such discovery and within that period, including a description of the nonconformity and complete information about the manner of its discovery, Contractor shall correct the nonconformity by, at its option, either (i) modifying or making available to City instructions for modifying the Software; or (ii) making available at Contractor's facility necessary corrected or replacement programs. Contractor shall have no obligation with respect to any nonconformities resulting from (i) unauthorized

modification of the Software or (ii) City-supplied software or interfacing. Contractor does not warrant that the functions contained in the software will operate in combinations which may be selected for use by City and not approved by Contractor, or that the software products are free from errors in the nature of what is commonly categorized by the computer industry as "bugs".

9.5 Upgrades

Contractor agrees to maintain the Software to operate on all compatible upgrades of the hardware product line and operations system used by City and all as specified in Exhibit E Service Grid Maintenance & Support Services Agreement.

9.6 Warranty Claims

Before the expiration of the warranty period, City must notify Contractor in writing if Equipment or Contractor Software does not conform to these warranties. Upon receipt of such notice, Contractor will investigate the warranty claim. The time required to resolve the warranty claim shall toll the warranty period, and the warranty period will resume upon resolution of the claim. If this investigation confirms a valid warranty claim, Contractor will (at no additional charge to City) repair the defective Equipment or Contractor Software, replace it with the same or equivalent product, or refund the price of the defective Equipment or Contractor Software. Repaired or replaced product is warranted for the balance of the original applicable warranty period or for thirty (30) days, whichever is longer; the applicable warranty period shall not otherwise be extended. All replaced products or parts will become the property of Contractor.

9.7 Contractor Agreements with City Employees

Neither Contractor nor any director, employee or agent of Contractor or its subcontractors or vendors shall knowingly, without prior written notification thereof to City, enter into any business relationship with any employee or agent of City unless such person is acting for and on behalf of City.

9.8 Exclusive Warranties

THE WARRANTIES IN SECTION 9 ARE THE EXCLUSIVE QUALITY AND PERFORMANCE WARRANTIES AND ARE IN LIEU OF ALL OTHER WARRANTIES OF QUALITY AND PERFORMANCE, WHETHER WRITTEN, ORAL OR IMPLIED, AND ALL OTHER WARRANTIES, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USAGE OF TRADE, ARE HEREBY DISCLAIMED. THE REMEDIES STATED HEREIN CONSTITUTE CITY'S EXCLUSIVE REMEDIES AND CONTRACTOR'S ENTIRE LIABILITY FOR ANY BREACH OF WARRANTY.

10 AUTHORITY TO MAKE AGREEMENT

Contractor represents and warrants that Contractor has full right and authority to perform its obligations under this Agreement. City shall be entitled to use the System without disturbance.

11 TERMINATION

11.1 Termination for Convenience

City shall have the right to terminate this Agreement, without cause, by giving not less than thirty (30) days' written notice of termination. Upon such termination, City shall pay Contractor reasonable termination charges, including but not limited to, (i) the Agreement price for all completed work at the time of the termination, (ii) all costs incurred prior to the effective date of notice of termination for the partially-completed work., (iii) all reasonable expenses incurred by Contractor exclusively attributable to the termination itself, plus (iv) a fixed amount of ten percent (10%) of the sum of (ii) and (iii) . In no event will such termination charges exceed the unexpended portion of the agreed Contract Price.

11.2 Termination for Default

If Contractor fails to perform any of its material obligations under this Agreement, in addition to all other remedies provided by law, City may terminate this Agreement immediately upon written notice. However, no termination by City for default shall be effective unless, within fifteen (15) days after receipt by Contractor of City's written notice specifying such default, Contractor shall have failed to initiate and pursue with due diligence correction of such specified default.

11.3 Termination Authority

The Director of Finance ("Director") or designee is empowered to terminate this Agreement on behalf of City.

11.4 Consequences of Termination

In the event of termination, Contractor shall deliver to City copies of all reports, documents, and other work performed by Contractor under this Agreement (subject to the execution by City of appropriate disclaimers for any incomplete reports, documents or other work) and for which City has made payment, and upon receipt thereof, City shall pay Contractor for services performed and reimbursable expenses incurred to the date of termination as provided in this Section 11.

12 INDEMNIFICATION

Contractor shall defend, indemnify and hold harmless City, its officers, employees and representatives against any third party claim, loss or liability for bodily injury, death, or third party property damage, and regulatory enforcement arising out of or resulting in any way from work performed under this Agreement to the extent due to the willful misconduct or negligent acts (active or passive) or omissions by Contractor's officers, employees or agents. The acceptance of said services and duties by City shall not operate as a waiver of such right of indemnification. City shall provide Contractor prompt written notice of such action, and all necessary assistance in the defense thereof.

13 OWNERSHIP AND CONTROL OF THE DATA

Unless otherwise agreed in writing by City and Contractor, all right, title and interest in any inventions, developments, improvements or modifications of or for Equipment, Software and/or Services shall remain with the originating party. Any intellectual property embodied in the design, manufacturing drawings or other information submitted to City remains the exclusive property of the originating party. City shall not, without Contractor's prior written consent, copy or disclose such Contractor intellectual property to a third party unless required by law, subject to prior written notification to Contractor. Such Contractor intellectual property shall be used solely for the operation or maintenance of the Equipment and Software, and not for any other purpose, including the duplication thereof in whole or in part.

City shall maintain ownership and control of its data. Contractor shall have the right to use the data solely to perform services under the Agreement with the City. Contractor may not use such data, a subset of the data, and/or a summary of the data, or, cause or permit such data, a subset and/or a summary, to be used by any third party, outside the scope of the Agreement without the express written consent of the City. Contractor shall provide City with a copy of the data in a mutually agreed-upon format at regular intervals and at such additional times as City deems appropriate. Contractor warrants that throughout all operational and maintenance activities the accuracy of the database will be preserved.

14 INSURANCE REQUIREMENTS

Contractor agrees to have and maintain the policies set forth in Exhibit C, entitled "Standard & Other Insurance Requirements," which is attached hereto and incorporated herein. All policies, endorsements, certificates and/or binders, as evidenced by the certificate of insurance that Contractor provides, shall be subject to approval by the Risk Manager of the City of San Jose as to form and content. These requirements are subject to amendment or waiver if so approved in writing by the Risk Manager and accepted in writing by Contractor. Contractor agrees to provide City with a copy of said certificates before work commences under this Agreement.

15 WAIVER

Each party agrees that the other party's waiver of any breach or violation of any provision of this Agreement shall not be deemed to be a waiver of any other provision or a waiver of any subsequent breach or violation of the same or any other provision. City's acceptance of the performance of any of Contractor's services will not be a waiver of any provision of this Agreement.

16 INDEPENDENT CONTRACTOR

Contractor, in the performance of this Agreement, is an independent contractor. Contractor shall maintain complete control over all of Contractor's employees, any subcontracting subcontractors, and Contractor's operations. Neither Contractor nor any person retained by Contractor may represent, act, or purport to act as the agent,

representative or employee of City. Neither Contractor nor City is granted any right or authority to assume or create any obligation on behalf of the other.

17 COMPLIANCE WITH LAWS

Contractor shall comply with all applicable laws, ordinances, codes and regulations (collectively, "laws") of the federal, state and local governments, including without limitation, any and all laws specified elsewhere in this Agreement.

18 CONFLICT OF INTEREST

Contractor shall avoid all conflict of interest or the appearance of conflict of interest in performance of this Agreement. As of the date of entering into this Agreement, Contractor's employees assigned to perform services as specified in Exhibit A of this Agreement ("Contractor's Assigned Employees") shall not be required to complete and file a Form 700 with the City Clerk. In the event that the City subsequently determines to require Contractor's Assigned Employees to complete and file a Form 700 with the City Clerk, City will notify Contractor in writing of such requirements, including without limitation, instructions regarding the categories of economic interests subject to disclosure on the Form 700 ("Form 700 Notice"). Contractor shall cause Contractor's Assigned Employees to complete and file the Form 700 with the City Clerk and to submit a copy to City's Project Manager, in accordance with the instructions specified in the Form 700 Notice, no later than thirty (30) days of the date of the Form 700 Notice.

19 NONDISCRIMINATION

Contractor agrees that there shall be no discrimination against, or segregation of, any person, on account of race, sex, color, age, religion, sexual orientation, actual or perceived gender identity, disability, ethnicity, national origin, marital status, or family status, in connection with or related to the performance of this Agreement.

20 GIFTS

20.1 Prohibition on Gifts

Contractor acknowledges that Chapter 12.08 of the San Jose Municipal Code prohibits City's officers and designated employees from accepting gifts as defined in Chapter 12.08.

20.2 No Offer

Contractor agrees not to offer any City officer or designated employee any gift prohibited by Chapter 12.08.

20.3 Breach of Agreement

Contractor's offer or giving of any gift prohibited by Chapter 12.08 of the San Jose Municipal Code ("Prohibition of Gifts") will constitute a material breach of this Agreement. In addition to any other remedies City may have in law or equity, City may terminate this Agreement for such breach as provided in Section 11 of this Agreement.

21 DISQUALIFICATION OF FORMER EMPLOYEES

Pursuant to Chapter 12.10 of the San Jose Municipal Code ("Revolving Door Ordinance") Contractor shall not utilize either directly or indirectly any officer, employee, or agent of Contractor to perform services under this Agreement, if in the performance of such services, the officer, employee, or agent would be in violation of the Revolving Door Ordinance.

22 CONTRACTOR'S BOOKS AND RECORDS

22.1 Maintenance during Term

Contractor shall maintain any and all ledgers, books of account, invoices, vouchers, canceled checks, and other documents evidencing or relating to charges for services, or expenditures and disbursements charged to City for a minimum period of three (3) years, or for any longer period required by law, from the date of final payment to Contractor pursuant to this Agreement.

22.2 Maintenance after Term

Contractor shall maintain all documents which demonstrate performance under this Agreement for a minimum period of three (3) years, or for any longer period required by law, from the date of termination or completion of this Agreement.

22.3 Inspection

Any documents required to be maintained pursuant to this Agreement must be made available for inspection or audit, at any time during regular business hours, upon written request by the City Attorney, City Auditor, City Manager, or a designated representative of any of these officers. Contractor shall provide copies of such documents to City for inspection at City Hall when it is practical to do so. Otherwise, unless an alternative is mutually agreed upon, the records shall be available at Contractor's address indicated for receipt of notices in this Agreement. In all events, these audits by City a) can take place only after Contractor has been given fifteen (15) days advance written notice of the intent to audit; b) will take place only after execution by City and/or its authorized agents or representatives (as the case may be) of a non-disclosure agreement acceptable to Contractor; and c) are limited only to those records directly relating to the quality of the work or that directly substantiate the costs that are the express basis on which City has paid Contractor.

22.4 Custody of Records

Where City has reason to believe that any of Contractor's documents relating to this Agreement may be lost or discarded due to Contractor's actual dissolution, disbandment or termination of Contractor's business, City may, by written request by any of the above-named officers, require that custody of the Contractor's documents be given to City and that these documents be maintained in City Hall. City agrees to grant access to Contractor's documents to any party authorized by Contractor, Contractor's representatives, or Contractor's successor-in-interest.

23 ASSIGNABILITY

The parties agree that the expertise and experience of Contractor are material considerations for this Agreement. Unless specifically authorized by this Agreement, Contractor may not assign the performance of any obligation or interest under this Agreement without the prior written consent of City. Any attempt by Contractor to assign this Agreement, in violation of this Section 23, will be voidable at City's sole option.

24 SUBCONTRACTORS

24.1 Authorized Subcontractors

Notwithstanding Section 23 (Assignability) above, Contractor may use designated subcontractors upon advance written approval by City in performing Contractor's services. Contractor must obtain City's prior written consent in order to change or add subcontractors. Contractor shall be responsible for directing the work of the approved subcontractors and for any compensation due to subcontractors. City assumes no responsibility whatsoever concerning such compensation. City's approval under this Section 24.1 is not required for relatively minor subcontractors who will not be entering the City's premises and whose subcontracts from Contractor are priced at less than ten percent of this Agreement's price.

24.2 Compliance with Agreement

Contractor shall ensure that Contractor's subcontractors comply with the applicable safety and technical provisions of this Agreement. At City's request, Contractor shall require any or all of Contractor's subcontractors to sign an agreement with Contractor requiring compliance with the applicable safety and technical provisions of this Agreement.

25 GOVERNING LAW

This Agreement must be construed, and its performance enforced under California law.

26 VENUE

In the event that suit is brought by either party to this Agreement, the parties agree that venue must be exclusively vested in the state courts of the County of Santa Clara, or where otherwise appropriate, exclusively in the United States District Court, Northern District of California, San Jose, California.

Contractor further agrees that in the event a lawsuit involving this Agreement is filed by City, Contractor will unconditionally accept the jurisdiction of a federal or state court located in Santa Clara County, California.

27 NOTICES

All notices and other communications required or permitted to be given under this Agreement must be in writing and must be personally served, or mailed, postage

RD:RLT 4/9/13

prepaid via U. S. mail (return receipt requested), or sent via courier service, addressed to the respective parties as follows:

To City: Director of Finance

City of San Jose

200 East Santa Clara Street, 13th floor

San Jose, CA 95113

and

Director of Environmental Services

City of San Jose

200 East Santa Clara Street, 10th floor

San Jose, CA 95113

To Contractor: Power Generation Operations Manager

29801 Euclid Avenue Wickliffe, OH 44092

Notice will be effective on the date personally delivered or if sent by courier service, on the date of receipt. If mailed, notice will be effective three (3) business days after deposit in the mail.

The parties may change their respective addresses in accordance with the provisions of this Section.

28 MISCELLANEOUS

28.1 Survival of Provisions

If any part of this Agreement is for any reason found to be unenforceable, all other parts nevertheless remain enforceable.

28.2 Assignment

Subject to the provisions of Section 23 (Assignability), this Agreement binds and inures to the benefit of the parties and their respective successors and assigns.

28.3 Headings

The headings of the sections and exhibits of this Agreement are inserted for convenience only. They do not constitute part of this Agreement and are not to be used in its construction.

28.4 Authority of City Manager

Where this Agreement requires or permits City to act and no officer of the City is specified, City's Manager or the designated representative of City's Manager has the authority to act on City's behalf.

29 FORCE MAJEURE

Contractor shall neither be liable for loss, damage, detention or delay nor be deemed to be in default for failure to perform when prevented from doing so by causes beyond its reasonable control including but not limited to acts of war (declared or undeclared), Acts of God, fire, strike, labor difficulties, acts or omissions of any governmental authority or of City, compliance with government regulations, insurrection or riot, embargo, delays or shortages in transportation or inability to obtain necessary labor, materials, or manufacturing facilities from usual sources or from defects or delays in the performance of its suppliers or subcontractors due to any such causes. In the event of delay due to any such cause, the date of delivery will be extended by a period equal to the delay plus a reasonable time to resume production.

30 SOFTWARE LICENSE

Except as provided in Exhibit E, Contractor owns all rights in or has the right to sublicense all of the Software, if any, to be delivered to City under this Agreement. As part of the sale made hereunder City hereby obtains a limited license to use the Software, subject to the following: (i) the Software may be used only in conjunction with equipment specified by Contractor; (ii) the Software shall be kept strictly confidential; (iii) the Software shall not be copied, reverse engineered, or modified; (iv) City's right to use the Software shall terminate immediately when the specified equipment is no longer used by City or when otherwise terminated, e.g. for breach, hereunder; and (v) the rights to use the Software are non-exclusive and non-transferable, except with Contractor's prior written consent. Nothing in this Agreement shall be deemed to convey to City any title to or ownership in the Software or the intellectual property contained therein in whole or in part, nor to designate the Software a "work made for hire" under the Copyright Act, nor to confer upon any person who is not a named party to this Agreement any right or remedy under or by reason of this Agreement. In the event of termination of this License, City shall immediately cease using the Software and, without retaining any copies, notes or excerpts thereof, return to Contractor the Software and all copies thereof and shall remove all machine readable Software from all of City's storage media.

31 LIMITATION OF LIABILITY

Contractor's aggregate liability for all claims, whether in contract, warranty, tort, negligence, strict liability, or otherwise for any loss or damage arising out of, connected with, or resulting from this Agreement or the performance or breach thereof, or from the design, manufacture, sale, delivery, resale, repair, replacement, installation, technical direction of installation, inspection, operation or use of any equipment covered by or furnished under this Agreement shall in no case exceed Five Million Dollars (\$5,000,000.00). In no event shall the consequential damages portion of the Five Million Dollars limitation exceed the total Agreement price. All causes of action against Contractor arising out of or relating to this Agreement or the performance or breach hereof shall expire unless brought within one year of the City's final acceptance of the DCS System 800xA. Despite its placement herein, this Section shall apply to the entire

RD:RLT	
4/9/13	

Agreement. Notwithstanding the foregoing, any limitation of liability to the Service Grid Maintenance & Support Services and Other Equipment Purchase Agreements under Exhibits E and F, respectively, shall be as provided in those agreements.

APPROVED AS TO FORM:	City of San José, a municipal corporation
ROSA TSONGTAATARII Senior Deputy City Attorney	By NORBERTO DUENAS Deputy City Manager
	Date:
	ABB Inc. dba ABB DE Inc., a Delaware corporation
	By JEFF VENNETTI Vice President
	Data

EXHIBIT A SCOPE OF SERVICES

1 Overview

The San Jose/Santa Clara Water Pollution Control Plant ("Plant") is a regional facility that serves businesses and over 1.4 million residents from the cities of San Jose, Santa Clara, and its tributary partners: the City of Milpitas, West Valley Sanitation District, Cupertino Sanitary District, County Sanitation Districts 2-3, and the Burbank Sanitary District. The Plant has a dry weather design capacity of 167 mgd and a wet weather hydraulic capacity of 271 mgd of wastewater each day, and currently processes an average of 117 mgd of wastewater each day.

ABB Inc. provides the current distributed control system ("DCS") that enables the Plant to monitor and control all critical aspects of the Plant's complex processes and operations. The existing DCS ("DCS System Six") is comprised of 18 Distributed Control Units ("DCU"), 9 Conductor NT servers, and approximately 35 clients. The DCS System Six has approximately 7300 wired I/O (input/output) points and 14,000 to 15,000 points via communication links. The Human Machine Interface ("HMI") of the DCS System Six is comprised of graphics, trends, alarms, events, face plates, existing user help screens, security, system management tools and network parameter tools. The HMI enables the operators to monitor and control the Plant's electrical, hydraulic, biological and chemical processes.

This Exhibit sets forth the scope of services required to upgrade the DCS System Six to the 800xA platform. Specifically, Contractor shall provide all services necessary to successfully upgrade the DCS System Six to the 800xA platform including, but not limited to, providing the new hardware and software, converting the HMI to the 800xA platform, and providing the necessary training, project management, testing, system commissioning, and technical support to fully operate the Plant under the DCS System 800xA.

2 Contractor Responsibility

- **2.1** The Contractor shall upgrade the DCS System Six to the 800xA platform ("DCS System 800xA").
- **2.2** The Contractor shall provide, as part of the upgrade, software, hardware, HMI graphics conversion, project management, documentation, onsite support, startup & commissioning services, and training.
- **2.3** The Contractor shall convert the HMI for the new DCS System 800xA platform at Contractor's facility.
- **2.4** The Contractor shall work with City staff to rollout the DCS System 800xA by bringing each Plant process area online while the DCS System Six continues to run in parallel until the entire Plant is online using the DCS System 800xA platform.

2.5 The scope of this project will not involve changing DCU ("Distributed Control Unit") controller hardware or control logic residing in the controllers. The DCS System 800xA must operate with the existing DCUs.

3 City Responsibility

- **3.1** The City will supply the Contractor with the necessary information to upgrade the DCS System Six including the configuration files. It shall be noted that any information provided to the Contractor remains the property of the City and shall be kept confidential by the Contractor.
- **3.2** The City will provide training facility and working space for the Contractor's staff at the Plant.

4 Software

- **4.1** In preparation for this upgrade, the City has procured, under separate agreements, the maintenance and support for the following software:
 - 4.1.1.1 800xA platform licensed for 7000 tags
 - 4.1.1.2 DCI Connectivity Server software
 - 4.1.1.3 Aspect Server software

4.2 The Contractor shall provide the following software and related hardware:

Number	Quantity	Item
4.2.1	1	800xA Base System, includes 1 Operator Workplace
		1 Engineering Workplace
		AC800M Connect Redundant Aspect Server
4.2.2	30,000	Redundant TAG licenses for 800xA
4.2.3	1	OPC Client Connect Software
4.2.4	1	DCI Connect Software
4.2.5	1	PLC Connect Software
4.2.6	1	Audit Trail
4.2.7	1	Calculation Engine
4.2.8	39	Operator Workplaces - Additional Clients
4.2.9	9	Operator Workplaces – Remote Clients
4.2.10	4	Engineering Workplaces - Additional Rich Clients
4.2.11	1	Information Management Software Licenses
4.2.12	1	Operator Workplace – Remote Client (Expansion)
4.2.13	1	MS SQL Server License (Processor Based) (Expansion)

- **4.3** The Contractor shall be responsible for providing all necessary hardware and software licenses to support full conversion of Conductor NT HMI to the 800XA platform.
- 4.4 The licenses for the software to be provided by the Contractor under this Agreement have been paid for by the City pursuant to a separate agreement between the City and Contractor. (See Exhibit E Service Grid Maintenance & Support Agreement) The license for the operator workplace remote client (expansion) product, however, is additional software purchased under this Agreement as set forth in Exhibit B Compensation & Price List. The Contractor shall provide hardware and software that is fully compatible with the 800xA platform.
- **4.5** At the beginning of the project, the Contractor shall enable and test the DCI connect software to ensure is the software is working properly with the existing system without any negative impacts on Plant operations. The Contractor is responsible for

configuring and implementing the DCI connect server and its proper operation to support a successful upgrade.

5 Hardware

- 5.1 The Contractor shall provide server and client hardware that meets the following minimum specifications: Intel Xeon processor with a 4GB memory (servers), 4GB memory (clients) 133MHz dual channel memory, 4x DVD R/W +/-, 512MB video card (Clients), RAID 1 250GB hard drive (client), RAID 1 250GB (servers).
- **5.2** The Contractor shall provide power requirements for the cabinets 90 days prior to installation.
- **5.3** The Contractor shall provide drawings of cabinet layout prior to shipment.
- **5.4** City will install the cabinets upon receiving the shipment.
- **5.5** The Contractor shall be responsible for mounting equipment in the cabinets on site.
- **5.6** The Contractor shall deliver the following hardware:

Number	Quantity	Item
5.6.1	40	Operator Workstations (Local or Remote Clients) with single 24" LCD monitors including licenses
5.6.2	10	Operator Workstations (Local or Remote Clients) with dual 24" LCD monitors including dual monitor licenses
5.6.3	5	Engineering workstations with dual 24" LCD monitors including dual monitor licenses
5.6.4	2	Server cabinets housing the following 19" rack mounted items as noted below
5.6.5	1	Network based storage with a minimum capacity of 16TB, with RAID 60 capability in each cabinet
5.6.6	1	Time server machine
5.6.7	1	Rack mounted Aspect Server in each cabinet connected to the SAN
5.6.8	3	Rack mounted DCI connectivity Servers in each Cabinet
5.6.9	1	Rack mounted monitor (LCD 17"), KVM console and keyboard/mouse in each cabinet
5.6.10	1	Domain controller server in each cabinet
5.6.11	1	Terminal Server in each cabinet

6 Connectivity Infrastructure

- **6.1** The Contractor shall provide the necessary hardware to set up a new 800xA based network which is parallel to the DCS System Six network.
- **6.2** City staff will install and configure the equipment.
- **6.3** City will provide the fiber backbone and other cabling necessary to connect the network.
- **6.4** City will provide the cabinet space necessary to house these switches.
- **6.5** The Contractor shall provide this equipment at the start of the project.
- **6.6** The Contractor shall provide the following Connectivity Infrastructure equipment:

Number	Quantity	Item
6.6.1	39	Hirschmann DIN Rail Mount switches. Each supports 8 RJ45 ports and 2 SFP ports.
6.6.2	50	Hirschmann Fiber SFP Module
6.6.3	9	Cisco Rackmount 24 Port switches with 24 RJ45 ports and
6.6.4	9	Cisco Expansion Module supporting 4 SFP ports
6.6.5	22	Cisco Fiber SFP Module

7 HMI Conversion Services

- 7.1 The Contractor shall consult with City staff about City needs for the DCS System 800xA, and consider existing HMI setup for the design of the new HMI. The Contractor shall confirm that the converted graphics, software and any other interface feature is acceptable to the City team. The Contractor shall perform the following HMI conversion services:
- 7.1.1 The Contractor shall obtain from the City an up to date electronic copy of the system and graphics files of the existing system as a starting point for the conversion process.
- 7.1.2 The Contractor shall be responsible for extracting all relevant information from the existing system files. In the event that the 800xA platform cannot support an existing graphic or elements of the graphic's behavior, the Contractor shall build new compatible graphic elements to provide the functionality needed.
- 7.1.3 Prior to the start of the conversion process, the Contractor and the City staff shall establish written basic conventions to be followed during the development of the new system.

- 7.1.4 Details such as text fonts and sizes, background color(s), static and dynamic colors, dynamic element behavior, and the hierarchy of graphic navigation shall be demonstrated and documented.
- 7.1.5 The Contractor shall make the necessary changes to the HMI or other elements of the system as directed by City staff.
- 7.1.6 The Contractor shall test the converted graphics and sub models and demonstrate to City that the converted graphics work and are fully accurate.
- 7.1.7 The Contractor shall ensure that the HMI conversion is fully accurate.
- 7.1.8 The Contractor shall turn over engineering/configuration data to the City upon final acceptance of the DCS System 800xA.

Based on the Contractor's inspection of the DCS System Six, the Contractor shall convert the following minimum quantities of HMI:

Number	Quantity	Item
7.1.9	22011	Real Time Tags
7.1.10	9161	Historical tags
7.1.11	672	Low Density (1-20 Dynamics)
7.1.12	1254	PopMport mini Graphic displays
7.1.13	412	Medium Density Graphics (21-49 Dynamics)
7.1.14	34	High Density Graphics (50+ Dynamics)
7.1.15	234	(Unique) Custom Sub-models
7.1.16	1832	Trend Displays
7.1.17	10	Excel Reports

7.2 The Contractor shall also be responsible for customizing faceplates, icons and other standard features to meet existing City requirements.

Contractor shall provide additional HMI conversion services at no additional cost to the City if additional HMI quantities are necessary to achieve full functionality of the DCS System 800xA, and the additional HMI quantities are not a result of changes initiated by the City after Contractor started the HMI conversion services.

The City reserves the right to request the Contractor to convert additional quantities if additional HMI conversion services are necessary as a result of changes initiated by the City after Contractor started the HMI conversion services. The City will pay for the additional quantities based on the rate specified in Exhibit B for Supplemental HMI Conversion Services.

7.3 Alarm & Events Management

- 7.3.1 The Contractor shall utilize the existing Plant alarm management as a starting point and implement the complete alarm management suite offered including alarm analysis and alarm philosophy definition by the Contractor that is tailored to meet the needs of the Plant.
- 7.3.2 The Contractor shall record the following alarm events:

7.3.4.1	Initial Alarm	
	7.3.2.2	Return to normal
	7.3.2.3	Acknowledge
	7.3.2.4	Alarm condition

7.3.3 Contractor's alarm management suite shall generate reports showing the following:

7.3.3.1	Frequency of total alarms over time
7.3.3.2	By area
7.3.3.3	By priority
7.3.3.4	By tag name
7.3.3.5	By frequency

- **7.4** All alarm events shall be time stamped. The alarm management shall replicate the existing Conductor NT alarm lines and functionality.
- **7.5** At the top of each display, the alarm management area shall include the two most recent alarms, a line for messages and a line for events.
- **7.6** The DCS System 800xA shall be configured to replicate the Conductor NT alarm and event windows and functionality of sorting and searching by including, but not limited to, elements such as area, priority, and time.

- **7.7** The DCS System 800xA shall support at least 16 alarm priorities, consistent with Conductor NT.
- **7.8** Typical fields available for configuration within an Alarm and Event Lists should include, but not be limited to, elements such as Tag Name, Tag Description, Alarm Acknowledgement, condition, current value, violated limit, event time, alarm priority, and alarm group.

8 Project Management

- 8.1 The Contractor shall develop a project plan to effectively coordinate and communicate between City staff and the Contractor's staff. In order to achieve this goal, the Contractor shall assign a qualified Project Manager to the project. The Project Manager shall act as the single point of contact for all matters related to project scope, schedule, and cost. The Project Manager shall develop the project plan in conjunction with the Project Team and shall be responsible for its execution in accordance with the scope of this Agreement. City shall have the right to approve or reject members of the Contractor's team if necessary during the project.
- **8.2** The Contractor shall provide the following project management deliverables:
- 8.2.1 Monthly status reports that includes status and progress of various deliverables, forecast for the next month's activities, deviation from original schedules and reasons if any.
- 8.2.2 The contractor shall make available their online project communication software tool called the "teamsite". All project related documents, comments, testing procedures, tracking of events and schedules shall be communicated via the "teamsite" online tool.
- 8.2.3 The Project Plan shall include project schedule with milestones.
- 8.2.4 City will provide meeting space and communications equipment as necessary.
- 8.2.5 In the interest of maintaining security at the Plant facility, Contractor shall provide the City project manager a list of their team members who will be working on-site at the Plant, and an updated list if team members are added or removed from the list no later than 48 hours prior to the proposed change.

9 Implementation

9.1 Upon conversion of graphics off site, the Contractor is responsible for commissioning the DCS System 800xA at the Plant. The Contractor shall provide adequate training, documentation and project communications to ensure a timely, event free and orderly rollout of the DCS System 800xA at the same time that the DCS System Six is still in use for Plant operations.

9.2 Technical Training

9.2.1 The Contractor shall provide the following technical training to the Plant control system technical staff. The City will provide a training facility equipped with computers

and projector system with internet access. The City shall have the right to switch any of these courses with other similar or related course.

9.2.2 The Contractor shall provide the following on-site technical training:

Number	Quantity	Item
9.2.3	1	T325- System 800xA for DCI System Six Connect
9.2.4	1	T305 - System 800xA Administration and Installation System
9.2.5	1	T315F&H - 800xA Engineering using Function Designer
9.2.6	1	T306 - System 800xA Information Management – Configuration

9.2.7 The Contractor shall provide the following off-site training:

Number	Quantity	Item
9.2.8	4	E143 - 800xA Troubleshooting Core System
9.2.9	4	E144- 800xA Performing a System Health Check
9.2.10	4	E171- 800xA Operator Workplace – Adv Dsgn and Graphic Configuration

9.3 Operator Training

- 9.3.1 The Contractor is responsible for providing "user training" for operators and other stakeholders during the commissioning phase of the project. This training shall be provided on site at the Plant in a class room type environment. This training shall be provided during all shifts and operations schedule.
- 9.3.2 Currently there are approximately fifty (50) operators working 3 shifts. Other stakeholders include, but are not limited to, Mechanical staff, Electrical & Instrumentation staff and Management staff
- 9.3.3 There are approximately one hundred (100) total users who will need training including operators. The Contractor shall be responsible for creating a custom package that explains navigation and functionality of the DCS System 800xA including graphics, alarm management, trends and advanced graphics functions.
- 9.3.4 The Contractor shall customize the training using the HMI graphics converted for use with DCS System 800xA at the Plant.
- 9.3.5 The Contractor shall explain features of the DCS System 800xA as it relates to the Plant configuration and controls.
- 9.3.6 The Contractor shall provide training documentation for classroom use and future reference. The City may video record the training sessions, and retain such videos for future training use subject to the signing of an appropriate release document.

10 Acceptance & Testing

10.1 Preliminary Testing

- 10.1.1 The Contractor shall conduct preliminary testing of the DCS System 800xA at the Contractor's site during the conversion process.
- 10.1.2 The Contractor shall develop testing procedures, subject to approval by the City's project manager.
- 10.1.3 The Contractor shall test all graphics against the Plant's configuration to make sure that all dynamic elements are able to execute desired results when communicating to the existing DCUs. The Contractor shall make sure that the same graphics will work with the future replacement of the DCU controller hardware such as the AC800M.
- 10.1.4 The City staff shall be able to participate in the preliminary testing process. The City staff shall have remote access to the DCS System 800xA at the Contractor's site.
- 10.1.5 When a graphic is completed, the Contractor shall inform the City. At this time the City staff shall be allowed to test the graphic and all its elements.
- 10.1.6 The test should at a minimum, check for accuracy of implementation, failure modes, Correctness and alarm/quality indication of dynamic graphic elements and functional correctness for a period of time sufficient to demonstrate proper operations.
- 10.1.7 System malfunctions discovered during the testing shall be documented and corrected.
- 10.1.8 Communication and tracking of these events shall utilize the communication software tool provided by the Contractor called the "teamsite".
- 10.1.9 At the end of the DCS System 800xA build out, all graphics shall have been tested before a visit to the factory is performed.
- 10.1.10 All errors discovered during the preliminary testing period shall be corrected before the factory acceptance test visit.

10.2 Factory Acceptance Test & Travel

- 10.2.1 Factory acceptance test means testing and familiarization of the DCS System 800xA by City staff and the Contractor's staff at the Contractor's site. Factory acceptance test shall be scheduled after the entire HMI has been converted to the 800xA platform at the Contractor's site.
- 10.2.2 The factory acceptance test criteria shall be developed by the Contractor and approved by the City. The factory acceptance test criteria shall be approved before City staff goes to the Contractor's site. At a minimum the factory acceptance shall include: testing the functionality of the graphics, performance of all displays, configuration of data collection, excel spreadsheets, trends, pop up windows, right click options, navigation, log in and permissions.
- 10.2.3 For the factory acceptance test, the Contractor shall host up to four (4) City staff at Contractor's facility for the purpose of becoming familiar with the DCS System 800xA, and to conduct the factory acceptance test.
- 10.2.4 The Contractor shall be responsible for travel, lodging and meals expenses and shall coordinate and arrange the same.

- 10.2.5 The factory acceptance test shall be conducted over a course of at least five full working day sessions to provide a complete opportunity to become familiar and to fully test the DCS System 800xA.
- 10.2.6 The City staff shall have full access to the DCS System 800xA and at least one Contractor's project staff to provide information and answer technical questions.
- 10.2.7 The factory acceptance test shall be approved by the City. If there are errors discovered during the factory acceptance test, they shall be documented. The Contractor shall correct these errors before the DCS System 800xA is shipped to the Plant.
- 10.2.8 If all errors are not corrected while the City staff is still present at the Contractor's site, City may accept the factory test subject to the errors being corrected before shipment.
- 10.2.9 Contractor shall perform a full back-up of the DCS System 800xA prior to dismantling the equipment for shipment.
- 10.2.10 Upon approval of the factory acceptance test, the Contractor shall dismantle the equipment from the cabinets and ship the cabinets and equipment to the Plant at the Contractor's expense.

10.3 Commissioning of the DCS System 800xA

- 10.3.1 Upon receiving the equipment, the City shall install the cabinets and provide power to the cabinets.
- 10.3.2 The Contractor shall be responsible for mounting the equipment inside the cabinets.
- 10.3.3 Once the equipment is mounted and connected to the new 800xA network, the Contractor shall make sure that this connection does not have any negative impact on the proper function of the existing DCS System Six.
- 10.3.4 Once a normalized connection is set up and tested, the commissioning of the new 800xA system shall commence.
- 10.3.5 The Contractor shall be responsible for commissioning and start up of the system onsite at the Plant.
- 10.3.6 The end of commissioning of the system means that the entire Plant control system HMI is successfully transferred over to the new DCS System 800xA.
- 10.3.7 The commissioning of the system shall be completed based on process areas of the Plant, in phases, where one process area at a time is brought online in parallel to the DCS System Six.
- 10.3.8 The commissioning period shall be a minimum of 90 days.
- 10.3.9 For the purpose of measuring and ensuring that the DCS System 800xA will perform at a minimum at the same level or better than the DCS System Six, the Contractor shall bench mark the performance of the DCS System Six prior to the start of the commissioning of the DCS System 800xA.

- 10.3.10 Based on the bench mark established at the start of the commissioning process, the DCS System 800xA shall at a minimum, match the responsiveness, data acquisition & display, control and graphic refresh rate of the DCS System Six.
- 10.3.11 Errors discovered during the commissioning period shall be fixed by the Contractor at the Contractor's expense based on the timeframes described in the table under section 10.4.4. If the errors are not fixed within the timeframe outlined in section 10.4.4 under maximum resolution time, the additional time spent on fixing errors shall not count towards the 90 day commissioning period.

10.4 Final Acceptance Test

- 10.4.1 Upon the completion of the commissioning period with all errors corrected, the final acceptance test period shall begin.
- 10.4.2 Final acceptance test means that the Plant shall be running on the new system error free for a minimum of 60 consecutive days.
- 10.4.3 Errors or anomalies discovered during the final acceptance test shall be fixed by the Contractor based on the response time outlined in section 10.4.4. If the errors are not fixed within the timeframe outlined in section 10.4.4 under maximum resolution time, the final acceptance period shall restart.
- 10.4.4 Errors discovered during this period shall have the following characterization and response timeframe:

Error Level	Description	Definition	Maximum Resolution Time
1	Major Error without Workaround	Abnormal termination that cannot be bypassed Major numerical errors Data corruption Unimplemented requirements	48 hr
2	Major Error with Workaround	Abnormal termination that can be bypassed Small numerical errors Minor failures implementing requirements	72 hr
3	Cosmetic Error	Formatting Description Display Message	96 hr

10.4.5 The City will keep a retainer amount for items consistent with Exhibit A-1 – Payment and Performance Schedule preceding the final acceptance test. This accumulated amount shall be applied towards the final acceptance test and shall be paid upon completion of the final acceptance test.

10.5 Documentation

10.5.1 The Contractor shall document all standard and customized changes to the new system. All hardware changes and additions, including but not limited to DCU chassis, rack mounted equipment, shall be documented in AUTO CAD.

- 10.5.2 Contractor shall provide documentation in electronic format such as DVD media format.
- 10.5.3 Contractor shall provide an up to date copy of the configuration files based on the final accepted system configuration.
- 10.5.4 The Contractor shall at a minimum provide one set of As-Shipped System 800xA Full Back-up files.
- 10.5.5 The Contractor shall provide 3 sets of standard 800xA installation and configuration manuals.

11 Technical Support

11.1.1 The Contractor shall provide maintenance and technical support pursuant to the terms and conditions of the Service Grid Maintenance and Support Agreement in Exhibit E.

EXHIBIT A-1 PAYMENT AND PERFORMANCE SCHEDULE

Contractor shall complete each project item pursuant to the following payment and

performance schedule:

репогтаг	nce schedule:	E(0)C(+)				
	Deliverables	Date (mos)	Due Date	Base Amount		Net Paymer
Project Management	Project Plan as noted under section 8 of Exhibit A - Scope of Services.	1	7/1/2013	\$106,050	\$31,815 -	\$74,23
Software	Operator Workplace Remote Client under 3.2 of Exhibit B.	1	7/1/2013	\$7,980	\$0	\$7,98
Hardware	All hardware listed under 3.3 of Exhibit B	2	7/31/2013	\$342,340	\$0 ₋	\$342,34
Connectivity Infrastructure	All hardware items listed under 3.4 of the Exhibit B.	2	7/31/2013	\$138,740	\$0	\$138,74
HMI Conversion Services	All conversion Quantities Listed under 3.5 of the Exhibit B. (Half way through conversion)	6	11/30/2013	\$286,352	\$85,906	\$200,44
HMI Conversion Services	All conversion Quantities Listed under 3.5 of the Exhibit B. (Completion of Conversion)	11	5/1/2014	\$429,528	\$128,858	\$300,67
Alarm & Event Management	Provide Alarm and Event Management Software as per Section 7.3 of Exhibit A - Scope of Services.	11	5/1/2014	\$30,000	\$9,000	\$21,00
Acceptance & Testing	Travel & Lodging, Factory acceptance test and familiarization, system commissioning and start up on site as noted under 3.7 of Exhibit B.	11	5/1/2014	\$44,000		\$30,80
System Shipping & Receiving	Upon factory acceptance is completed, contractor shall ship the equipment to the Plant as noted under section 10.2.10 of Exhibit A - Scope of Services	14	7/31/2014	\$0	\$0	
Technical Training	All training courses listed under 3.8 of the Exhibit B.	17	10/31/2014	\$167,275	\$0	\$167,27
Operator Training	All training courses listed under 3.9 of the Exhibit B.	17	10/31/2014	\$50,000	\$0	\$50,00
System Commissioning On Site	Please note Section 10.3 Commissioning of the DCS system 800xA, of Exhibit A - Scope of Services	19	12/30/2014	\$212,520		\$148,76
Documentation	Documentation to be provided on CDs and DVDs under 3.10 of Exhibit B.	19	12/30/2014	\$0	\$0	\$
Final Acceptance	Total retainer amount under Section 10.4.5 of Exhibit A -Scope of Services.	21	3/1/2015	\$332,535	\$0	\$332,53
SUBTOTAL		***************************************	. "''	\$1,814,785	\$332,535	\$1,814,78
TOTAL (excludin	g Change Orders)					\$1,814,78
Change Orders				1000		1 130%.
TOTAL (including	g Change Orders)					\$1,814,78
	<u> </u>			77	210.	

EXHIBIT B COMPENSATION & MASTER PRICING LIST

1. Compensation:

- 1.1 The maximum amount payable for all products and services provided under this Agreement shall not exceed ONE MILLION EIGHT HUNDRED FOURTEEN THOUSAND SEVEN HUNDRED EIGHTY FIVE Dollars (\$1,814,785.00). The DCS System 800xA is a comprehensive solution. Contractor is responsible for providing all necessary hardware, software and services required to enable the DCS System 800xA to optimally and fully function. Any additional hardware, software or services (excluding Supplemental HMI Conversion Services) required to achieve full and optimum functionality that is not listed in this Exhibit shall be provided by the Contractor at no additional cost to the City. Notwithstanding the above, the City may request that Contractor provide additional services beyond the services necessary for full functionality through the Change Order Procedures. No additional services will be performed unless both parties execute a Change Order outlining the services requested and the compensation agreed for such services.
- 1.2 Payment for any part or parts of the System provided hereunder, or inspection or testing thereof by City, shall not constitute acceptance or relieve Contractor of its obligations under this Agreement. City may inspect the components of the System when delivered and reject upon notification to Contractor any and all the System, which does not conform to the Specifications or other requirements of this Agreement. Components of the System, which are rejected shall be promptly corrected, repaired, or replaced by Contractor. If City receives components of the System with defects or nonconformities not reasonably apparent on inspection, then City reserves the right to require prompt correction, repair, or replacement by Contractor in accordance with Contractor's warranty obligations.
- **1.3** A retainer consistent with Exhibit A-1 Payment and Performance Schedule shall be applied towards the final acceptance test. The sum of the total accumulated retained funds shall be paid upon successful completion of the final acceptance test.

2. Payment Schedule:

- **2.1** Work shall commence immediately upon execution of the Agreement.
- 2.2 All Payments are based upon City's acceptance of Contractor's performance of the phase as evidenced by successful completion of the Deliverable for that Phase. City shall have no obligation to pay unless Contractor has successfully completed and City has approved the Project Phase for which payment is due
- **2.3** Compensation and payments shall be made to Contractor by City based on Net Thirty (30) days payment terms, upon receipt of the invoice approved by the City.
- **2.4** Invoicing procedure: Contractor will invoice the City based on the amounts set forth in the Payment and Performance Schedule table in Exhibit A-1.

3. Master Pricing List

The following is the master pricing list to correspond with the scope of services described within Exhibit "A":

3.1 Project Management

1 Lot	Project Management	\$106,050
	SUB TOTAL	\$106,050

3.2 Software

1	800xA Base System, includes	0
	- 1 Operator Workplace	
	- 1 Engineering Workplace	
	- AC800M Connect	
	- Redundant Aspect Server	
30,000	Redundant TAG licenses for 800xA	0
1	OPC Client Connect Software	0
1	DCI Connect Software	0
1	PLC Connect Software	0
1	Audit Trail	0
1	Calculation Engine	0
39	Operator Workplaces - Additional Clients	0
9	Operator Workplaces – Remote Clients	0
4	Engineering Workplaces - Additional Rich Clients	0
1 Lot	Information Management Software Licenses	0
1	Operator Workplace – Remote Client (Expansion)	\$7,980
	SUB TOTAL	\$7,980

3.3 Hardware

Quantity	Item	Price
40	Operator Workstations (Local or Remote Clients) with single 24" LCD monitors including licenses	\$154,260
10	Operator Workstations (Local or Remote Clients) with dual 24" LCD monitors including dual monitor licenses	\$39,675
5	Engineering workstations with dual 24" LCD monitors including dual monitor licenses	\$20,830
2	Server cabinets housing the following 19" rack mounted items as noted below	\$127,575
1	Network based storage device with a minimum capacity of 16TB, with RAID 60 capability in each cabinet	0
1	Time server machine in each cabinet	0
1	Rack mounted Aspect Server in each cabinet connected to the SAN	0

3	Rack mounted DCI connectivity Servers in each Cabinet	0
1	Rack mounted monitor (LCD 17"), KVM console and keyboard/mouse in each cabinet	0
1	Domain controller server in each cabinet	0
1	Terminal Server in each cabinet	0
	SUB TOTAL	\$342,340

3.4 Connectivity Infrastructure

39	Hirschmann DIN Rail Mount switches.	\$57,440
	Each supports 8 RJ45 ports and 2 SFP ports.	
50	Hirschmann Fiber SFP Module	\$11,000
9	Cisco Rackmount 24 Port switches with 24 RJ45 ports and	\$55,000
9	Cisco Expansion Module supporting 4 SFP ports	\$5,500
22	Cisco Fiber SFP Module	\$9,800
	SUB TOTAL	\$138,740

3.5 HMI Conversion Services

22011	Real Time Tags	
9161	Historical tags	
672	Low Density (1-20 Dynamics)	
1254	PopMport mini Graphic displays	
412	Medium Density Graphics (21-49 Dynamics)	
34	High Density Graphics (50+ Dynamics)	
234	(Unique) Custom Sub-models	
1823	Trend Displays	
10	Excel Reports	
	SUB TOTAL	\$715,880

3.5a Supplemental HMI Conversion Services

Per Section 7.2 of EXHIBIT A - SCOPE OF SERVICES, the City reserves the right to request Contractor to convert additional quantities if additional HMI conversion services are necessary as a result of changes initiated by the City after Contractor started the HMI conversion services. The City will pay for the additional quantities based on the rate specified below.

		Rate
1000	Real Time Tags (labor only, license extra, if	\$600
	license expansion is required)	
100	Historical tags (labor only, license extra, if	\$600
	license expansion is required)	
1	Low Density (1-20 Dynamics)	\$400.00
1	PopMport mini Graphic displays	\$400.00
1	Medium Density Graphics (21-49 Dynamics)	\$800.00
1	High Density Graphics (50+ Dynamics)	\$1,200.00
1	(Unique) Custom Sub-models	\$600.00
1	Trend Displays	\$100.00
1	Excel Report	\$1,600.00

3.6 Alarm & Events Management

Alarm & Event Management	\$30,000
SUB TOTAL	\$30,000

3.7 Acceptance & Testing

1 Lot	Travel, lodging & Meals		\$11,000
1 Lot	5-Day Factory Familiarization		\$33,000
1 Lot	Field Service for Startup/Commissioning/Site Testing		\$212,520
		SUB TOTAL	\$256,520

3. 8 Technical Training

1	T325- System 800xA for DCI System Six Connect (Onsite at the Plant)	\$27,119
1	T305 - System 800xA Administration and Installation System (Onsite at the Plant)	\$29,487
1	T315F&H - 800xA Engineering using Function Designer (Onsite at the Plant)	\$46,806
1	T306 - System 800xA Information Management – Configuration (Onsite at the Plant)	\$27,119
4	E143 - 800xA Troubleshooting Core System (ABB Classroom)	\$12,248
4	E144- 800xA Performing a System Health Check (ABB Classroom)	\$12,248
4	E171- 800xA Operator Workplace – Adv Dsgn and Graphic Configuration (ABB Classroom)	\$12,248
	SUB TOTAL	\$167,275

3.9 Operator Training

1 Lot	ABB Project Engineer Conducted Operator Training (1 Day Session repeated 10 times, each session with 5 students) (Onsite at the Plant)	\$50,000
	SUB TOTAL	\$50,000

3.10 Documentation

Documentation on CDs/DVDs	0
SUB TOTAL	\$0

EXHIBIT C STANDARD & OTHER INSURANCE REQUIREMENTS

CONTRACTOR, at CONTRACTOR'S sole cost and expense, shall procure and maintain for the duration of this AGREEMENT, insurance against claims for injuries to persons or damages to property which may arise from, or in connection with, the performance of the services hereunder by the CONTRACTOR, its agents, representatives, employees or subcontractors or suppliers. The cost of such insurance shall be included in the CONTRACTOR'S bid.

CONTRACTOR agrees to reasonably modify the insurance provisions below upon request of the City's Risk Manager provided CITY compensates CONTRACTOR for the additional cost to modify the insurance provisions. Any modifications to the insurance provisions shall be memorialized in an amendment to this Exhibit of the Agreement.

I. Scope and Limit of Insurance

There shall be no endorsements reducing the scope of coverage required below unless approved by the City's Risk Manager.

Ту	pe of Insurance	Limit
1.	Commercial or Comprehensive General Liability The coverage provided by Insurance Services Office "occurrence" form CG 0001 or similar, including coverages for contractual liability, personal injury, broadform property damage, independent contractors, products and completed operations.	\$5,000,000 per occurrence for bodily injury, personal injury and property damage or \$5,000,000 annual aggregate.
2.	Automobile Liability The coverage provided by Insurance Services Office form number CA 0001 or similar. Coverage shall be included for all owned, non-owned and hired automobiles.	\$1,000,000 combined single limit per accident for bodily injury and property damage.
3.	Workers' Compensation and Employer Liability As required by the Labor Code of the State of California.	\$1,000,000 combined single limit per accident for bodily injury and property damage.

4. Other (as checked below)

Тур	e of Insurance	Limit
4a.	Professional Liability/Errors and Omissions Including coverages for negligent acts, errors or omissions arising from professional services provided under this contract, with any deductible not to exceed \$25,000 each claim	\$5,000,000 each claim and annual aggregate
4b.	Environmental & Pollution Liability Including coverages for sudden and accidental pollution, gradual pollution, transportation and disposal of hazardous materials and cleanup costs, with any deductible not to exceed \$25,000 each occurrence, add City as additional insured	Not less than \$1,000,000 each occurrence
4c.	Aircraft Liability Including passenger liability, add City as additional insured	Not less than \$2,000,000 each occurrence,
4d.	Crime/Custodial/Security – Commercial Crime Insurance, Including coverages for loss sustained by a client as a result of employee dishonesty	Not less than \$500,000 each loss,
4e.	Garagekeepers Legal Liability Including coverages for all risks of loss or physical damage to vehicles in care, custody or control, and any deductible not to exceed \$5,000 each occurrence	Not less than \$500,000 each occurrence,
4f.	Inland Marine For property of others in transit or storage, and any deductible not to exceed \$5,000 each loss, including City as Loss Payee as its interests may appear.	Not less than the replacement value of property in care, custody or control

4g. Cyber & Technology Errors & Omissions

Technology/professional liability insurance and data protection liability insurance covering liabilities for financial loss resulting or arising from acts, errors, or omissions, in rendering services provided under this agreement as well as all Vendor costs, including damages it is obligated to pay Client or any third party, which are associated with any Security Breach (as hereafter defined) or loss of Personal Data, regardless of cause (including, without limitation, Vendor negligence or gross negligence and unlawful third party acts). Costs to be covered by this insurance policy shall include without limitation: (a) costs to notify individuals whose Personal Data was lost or compromised; (b) costs to provide credit monitoring and credit restoration services to individuals whose Personal Data was lost or compromised; (c) costs associated with third party claims arising from the Security Breach or loss of Personal Data, including litigation costs and settlement costs; and (d) any investigation, enforcement or similar miscellaneous costs. For the purposes of this Section, "Security Breach" means (1) the failure by the Vendor to properly handle, manage, store, destroy or otherwise control, or the unauthorized disclosure by the Vendor of: (a) Personal Data in any format or (b) third party corporate information in any format specifically identified as confidential and protected under a confidentiality agreement or similar contract; (2) an unintentional violation of the Vendor's privacy policy or misappropriation that results in the violation of any applicable data privacy laws or regulations; or (3) any other act, error, or omission by Vendor in its capacity as such which is reasonably likely to result in the unauthorized disclosure of Personal Data.

Please check with Risk & Insurance for limits

II. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions are Contractor's responsibility.

III. Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

1. General Liability and Automobile Liability Coverages

- a. The City, its officials, employees, and representatives are to be covered as additional insureds as respects: liability arising out of activities performed by, or on behalf of, the Contractor; products and completed operations of the Contractor; premises owned, leased or used by the Contractor; or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the City, its officials, employees, and representatives.
- b. The Contractor's insurance coverage shall be primary insurance as respects the City, its officials, employees, and representatives. Any insurance or self-insurance maintained by the City, its officials, employees, and representatives shall be excess of the contractor's insurance and shall not contribute with it.
- Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the City, its officials, employees, or representatives.
- d. Coverage shall state that the Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- e. The additional insured status and primary insurance coverage under items a. and b. above shall apply only to the extent of Contractor's indemnity obligation arising from its negligence and willful misconduct.

2. Omitted.

3. All coverages

Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled, reduced in coverage or in limits except after thirty (30) days' prior written notice has been given to the City; except that ten (10) days' prior written notice shall apply in the event of cancellation for non-payment of premium.

IV. Acceptability of Insurance

Insurance is to be placed with insurers rated A-VIII or better.

V. Verification of Coverage

Contractor shall furnish the City with certificates of insurance affecting coverage required by this clause. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

Copies of all the required CERTIFICATE OF INSURANCE shall be provided by the Contractor's insurance company as evidence of the stipulated coverages.

Proof of insurance shall be either emailed in pdf format to: Riskmgmt@sanjoseca.gov, or mailed to the following postal address (or any subsequent email or postal address as may be directed in writing by the Risk Manager):

City of San Jose – Finance Department Risk & Insurance 200 East Santa Clara St., 14th Floor San Jose, CA 95113-1905

VI. Subcontractors

Contractors shall include all on-site subcontractors as insureds under its policies or shall obtain separate certificates and endorsements for each on-site subcontractor.

EXHIBIT D CHANGE ORDER FORM CHANGE ORDER # __

the City of San Jose is hereby amended a		between and		
(The following language is hereby provided	as an example of how to complete	e this form.)		
1. Contractor shall provide the following	g additional services at the cos	ts indicated below:		
·				
TOTAL				
 The following services, products or deliverables are hereby deleted and the associated costs in amounts set forth below are also deleted. 				
TOTAL				
3. Exhibit is hereby amended to read attached hereto.	as set forth in the Revised Exh	nibitwhich is		
4. All of the terms and conditions of the remain in full force and effect.	Agreement not modified by Ch	nange Order shall		
I hereby certify that an unexpended appropriation is available in Fund fo	Total Cost of Change			
the Agreement, and that funds are available as of the date of this signature.				
	Previous Amendments			
	and/or Change Orders			
Principal Accountant Date	Original Contract			
ACCEPTANCE	APPROVED AS TO FORM			
Contractor hereby agrees to accept the				
amount set forth herein as payment in full of	ROSA TSONGTAATARII			
the work described and further agrees that Contractor is entitled to no additional time or compensation for such work other than as set forth herein.	Senior Deputy City Attorney			
	City of San José			
Contractor Date				
		Date		
	Director of Finance			

EXHIBIT E SERVICE GRID MAINTENANCE AND SUPPORT SERVICES AGREEMENT

Reserved
Purchase Order OP 48071 dated 10/18/12

EXHIBIT F OTHER EQUIPMENT PURCHASE

Reserved
Purchase Order OP 47933 dated 8/24/12